



SAFETY DATA SHEET	Revision Date: 11.07.2018
	Print Date: 10.12.2018
	SDS Number: R0702836
Natrosol™ 250 GR Hydroxyethylcellulose ™ Trademark, Ashland or its subsidiaries, registered in various countries 431370	Version: 2.4

Conforms to EU Regulation 1907/2006/EC as amended. - SDSGHS_BE

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : Natrosol™ 250 GR
Hydroxyethylcellulose
™ Trademark, Ashland or its subsidiaries, registered in
various countries

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use : Rheology modifier

1.3 Details of the supplier of the safety data sheet

Ashland
P.O. Box 8619
NL3009 AP, Rotterdam
Netherlands
+31 10 497 5000 (in the Netherlands), or
contact your local CSR contact person

EUSMT@ashland.com

1.4 Emergency telephone number

+1-800-274-5263/001-859-357-3564, or contact
your local emergency telephone number at
070/245.245

Product Information

+31 10 497 5000 (in the Netherlands), or contact
your local CSR contact person

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Precautionary statements : **Prevention:**

Keep dust/air mixtures away from ignition
sources.

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2.3 Other hazards
Additional advice

No information available.

SECTION 3: Composition/information on ingredients
3.2 Mixtures

Chemical nature : organic

Hydroxyethylcellulose

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
Substances with a workplace exposure limit :			
SILICA COLLOIDAL	112926-00-8 231-545-4 01-2119379499-16-0161		>= 1,00 - < 2,50

SECTION 4: First aid measures
4.1 Description of first aid measures

- General advice : No hazards which require special first aid measures.
- If inhaled : If breathed in, move person into fresh air.
 If unconscious, place in recovery position and seek medical advice.
 If symptoms persist, call a physician.
- In case of skin contact : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Remove contact lenses.
 Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.

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Never give anything by mouth to an unconscious person.
 If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:
 irritation (nose, throat, airways)

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures
5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
 Water spray
 Foam

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Organic dusts at sufficient concentration can form explosive mixtures in air.
 Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Carbon dioxide (CO₂)
 Carbon monoxide
 Nitrogen oxides (NO_x)
 Oxides of phosphorus
 Sodium oxides

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Specific extinguishing methods : Product is compatible with standard fire-fighting agents.

Further information : Standard procedure for chemical fires.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid dust formation.
Avoid breathing dust.
Material can create slippery conditions.
Persons not wearing protective equipment should be excluded
from area of spill until clean-up has been completed.
Comply with all applicable federal, state, and local regulations.

6.2 Environmental precautions

Environmental precautions : Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Pick up and arrange disposal without creating dust.
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For further information see Section 8 and Section 13 of the safety data sheet.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid dust formation.
Ensure all equipment is electrically grounded and bonded
before beginning transfer operations.
The material can accumulate static charge and can therefore
cause electrical ignition of flammable atmospheres.
Smoking, eating and drinking should be prohibited in the
application area.
For personal protection see section 8.
Maintain good housekeeping. Do not permit dust layers to
accumulate, for example, on floors, ledges, and equipment, in
order to avoid any potential for dust explosion hazards.

Advice on protection against fire and explosion : Take measures to prevent the build up of electrostatic charge.
Provide appropriate exhaust ventilation at places where dust
is formed.

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Hygiene measures : Avoid breathing dust.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : No smoking.

Advice on common storage : No materials to be especially mentioned.

Other data : Keep in a dry place. No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
SILICA COLLOIDAL	112926-00-8	TLV 8 hr	10 mg/m ³	BE OEL

8.2 Exposure controls

Engineering measures

Provide appropriate exhaust ventilation at places where dust is formed.

General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Eye protection : Safety glasses

Use eye protection according to EN 166.

Hand protection

Material : butyl-rubber



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Break through time : 480 min
Glove thickness : > 0,5 mm

Remarks : The exact break through time can be obtained from the protective glove producer and this has to be observed. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Skin and body protection : Wear as appropriate:
Safety shoes

Protective clothing complying with EN 13688.
Safety shoes complying with EN ISO 20345.

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter within the capabilities of the respirator/filter combination.
Where concentrations are above recommended limits or are unknown, or a cartridge type respirator is not adequate, wear a positive-pressure supplied-air respirator.

Respiratory protection complying with EN 136.
Respiratory protection complying with EN 140.
Respiratory protection complying with EN 14387.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : granules, powder

Colour : off-white

Odour : odourless

Odour Threshold : No data available

pH : 6,0 - 8,5
Concentration: 2 %
(as aqueous solution)



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Melting point/freezing point	: No data available
Boiling point/boiling range	: No data available
Flash point	: Not applicable
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: 30 g/m ³
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: 1,38 g/cm ³
Solubility(ies)	
Water solubility	: soluble, Limited by viscosity
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: 460 °C
Decomposition temperature	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Oxidizing properties	: No data available

9.2 Other information

Dust deflagration index (Kst)	: < 200 m.b./s
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Minimum ignition energy : > 10 mJ

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Dust may form explosive mixture in air.

10.4 Conditions to avoid

Conditions to avoid : Keep away from heat, flame, sparks and other ignition sources.

UV light.
Exposure to sunlight.
Exposure to moisture

10.5 Incompatible materials

Materials to avoid : Acids
Bases
Hydrogen fluoride
Oxidizing agents
strong bases

10.6 Hazardous decomposition products

Hazardous decomposition products : No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of exposure : Inhalation
Skin contact
Eye Contact
Ingestion



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Acute toxicity

Not classified based on available information.

Components:

SILICA COLLOIDAL

Acute oral toxicity : LD50 (Rat): > 10.000 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 5.000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Components:

SILICA COLLOIDAL

Result: Slight, transient irritation

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Unlikely to cause eye irritation or injury., Product dust may be irritating to eyes, skin and respiratory system.

Components:

SILICA COLLOIDAL

Result: Slight, transient irritation

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information**Product:**

Remarks: No data available

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SECTION 12: Ecological information

12.1 Toxicity

Components:

SILICA COLLOIDAL

Toxicity to fish : NOEC (Fish): 10.000 mg/l
Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 10.000 mg/l
aquatic invertebrates Exposure time: 24 h

Toxicity to algae : NOEC (Desmodesmus subspicatus (green algae)): 10.000
mg/l
Exposure time: 72 h

12.2 Persistence and degradability

Product:

Biodegradability : Result: Not readily biodegradable.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

Product:

Additional ecological : No data available
information

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Contaminated packaging : Empty remaining contents.

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SECTION 14: Transport information
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14.1 UN number
ADN: Not dangerous goods

ADR: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods

RID: Not dangerous goods

14.2 UN proper shipping name
ADN: Not dangerous goods

ADR: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods

RID: Not dangerous goods

14.3 Transport hazard class(es)
ADN: Not dangerous goods

ADR: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods

RID: Not dangerous goods

14.4 Packing group
ADN: Not dangerous goods

ADR: Not dangerous goods


INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS: Not dangerous goods

RID: Not dangerous goods

14.5 Environmental hazards
ADN: Not applicable

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ADR: Not applicable

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO: Not applicable

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER: Not applicable

INTERNATIONAL MARITIME DANGEROUS GOODS: Not applicable

RID: Not applicable

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Ship Type: Not applicable

Hazard code(s): Not applicable

Pollutant Category: Not applicable

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable


Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable

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Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
Not applicable

The components of this product are reported in the following inventories:

DSL	: All components of this product are on the Canadian DSL
AICS	On the inventory, or in compliance with the inventory
ENCS	On the inventory, or in compliance with the inventory
KECI	On the inventory, or in compliance with the inventory
PICCS	On the inventory, or in compliance with the inventory
IECSC	On the inventory, or in compliance with the inventory
TCSI	On the inventory, or in compliance with the inventory
TSCA	On TSCA Inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)


15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Further information

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Full text of H-Statements

Other information : The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (+31 10 497 5000).

Sources of key data used to compile the Safety Data Sheet
 Ashland internal data including own and sponsored test reports
 The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists
 BEI : Biological Exposure Index
 CAS : Chemical Abstracts Service (Division of the American Chemical Society).
 CMR : Carcinogenic, Mutagenic or Toxic for Reproduction
 FG : Food grade
 GHS : Globally Harmonized System of Classification and Labeling of Chemicals.
 H-statement : Hazard Statement
 IATA : International Air Transport Association.
 IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
 ICAO : International Civil Aviation Organization
 ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"
 IMDG : International Maritime Code for Dangerous Goods
 ISO : International Organization for Standardization
 logPow : octanol-water partition coefficient
 LCxx : Lethal Concentration, for xx percent of test population
 LDxx : Lethal Dose, for xx percent of test population.
 ICxx : Inhibitory Concentration for xx of a substance
 Ecxx : Effective Concentration of xx
 N.O.S.: Not Otherwise Specified
 OECD : Organization for Economic Co-operation and Development
 OEL : Occupational Exposure Limit

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P-Statement : Precautionary Statement
 PBT : Persistent , Bioaccumulative and Toxic
 PPE : Personal Protective Equipment
 STEL : Short-term exposure limit
 STOT : Specific Target Organ Toxicity
 TLV : Threshold Limit Value
 TWA : Time-weighted average
 vPvB : Very Persistent and Very Bioaccumulative
 WEL : Workplace Exposure Level

ABM : Water Hazard Class for the Netherlands
 ADR : Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADNR: Regulation for the Carriage of Dangerous Substances on the Rhine
 CLP : Classification, Labelling and Packaging
 CSA : Chemical Safety Assessment
 CSR : Chemical Safety Report
 DNEL : Derived No Effect Level.
 EINECS : European Inventory of Existing Commercial Chemical Substances.
 ELINCS : European List of Notified Chemical Substances
 GV: Exposure limits (DK)
 PEC : Predicted Effect Concentration
 PEL : Permissible Exposure Limits
 PNEC : Predicted No Effect Concentration
 R-pharse : Risk phrase
 REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals
 RID : Regulation Concerning the International Transport of Dangerous Goods by Rail
 S-phrase: Safety phrase
 WGK : German Water Hazard Class